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10/733,810	12/12/2003	Atsushi Narusawa	Q78953	8813

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EXAMINER
FABER, DAVID

ART UNIT	PAPER NUMBER
2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/733,810	NARUSAWA, ATSUSHI	
	Examiner	Art Unit	
	DAVID FABER	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5 and 14-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5 and 14-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is made in response to the amendment filed on 31 January 2008.

2. Claims 1, 5, 16, and 17 have been amended.

3. Claims 2, 3, 4, and 6 have been cancelled by the Applicant.

4. Claim 18 has been added.

5. The rejection of Claims 1-6 and 16-17 under 35 U.S.C. 112, second paragraph, has been withdrawn necessitated by the amendment. The rejection of Claims 1-6 under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al (US Patent 6,377,354, filed 9/21/1998, and further in view of W3School ("HTML Tutorial: Welcome to HTML School", published as of 1/23/2002) has been withdrawn necessitated by the amendment.

6. Claims 1, 5, and 14-18 are pending. Claims 1, 5, 14, 15, and 18 are independent claims.

Specification

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The phrases "computer-readable medium" is not found to have proper antecedent basis in the specification; however it is necessary to use this terminology in order to properly define the claim within the boundaries of statutory subject matter. In order to overcome the object, an amendment to the specification is

necessary constituting a non-exhaustive statement of what the phrase "computer-readable medium" would be as it would have been known to one of ordinary skill in the art at the time of the invention, in order to verify that the term "computer-readable medium" could not be taken in the context of non-statutory subject matter.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claim 5 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For your reference, below is a section from MPEP 2105 :

> (a) Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listings Per Se
> Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.
> Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.
> Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise

> statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.
> **Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim.**

10. Claim 5 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims appear to be claiming "software systems" i.e. systems without hardware indication, which is a computer program per se. Since the claims disclose computer program per se that is not embodied on a computer readable medium, they appear non-statutory.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 1, 5, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al (US Patent 6,377,354, filed 9/21/1998, and further in view of Oliver et al ("Sams Teach Yourself HTML and XHTML in 24 Hours", published as of 2/15/2001).

As per independent claim 1, Nguyen et al discloses performing control, when said tags are judged to be comprised, such that processing to form images is executed after completing processing to determine coordinate positions; and performing control, when said tags are judged not to be comprised, such that processing to form images is initiated before processing to determine coordinate positions is completed, wherein said judging, said performing control, when said tags are judged to be comprised, and said performing control, when said tags are judged not to be comprised, are conducted for the entire document. (Nguyen et discloses of analyzing a "suggested" location of the text and graphics elements to be printed by judging if the elements between each other contain positioning properties to cause overlapping, as known as the Z-order problem. If there is a overlapping issue of the elements at "the suggested" location based on the elements positioning, Nguyen merges the two objects together (i.e. retrieve the other object's position and merge the two as one wherein the combined element overall position is determined too) then sent to output buffer to be formed (i.e. drawn). If there is no overlap, then the elements are automatically formed by sending it to the printer to be formed (i.e. drawn on the bitmap buffer) by the printer wherein the bitmap location information is marked after being drawn and then stored for printing. In addition, none of these locations are preset since they are considered as "suggested" and not set under after judging if any of the elements overlapped. Nguyen et al discloses that a document requires many print calls be processed hence the method is repeated every time for each object presented in the document. (Abstract; Column 6, lines 35-49, 59-62; Column 7, 4-8, 16-61) Therefore, Nguyen discloses the limitations of judging the

elements' positions in the order of operation if the positions of the elements are determined first or the drawing of the elements occurs first.)

However, Nguyen et al fails to specifically disclose that the elements having tags in a document wherein the document is written in a structured tag language comprising any "position"-type tags, "margin"-type tags and "line height"-type tags. However, Oliver et al discloses the language HTML wherein a HTML document contains elements that include markup positioning type tags that discloses how to position text or image in a certain location. (second half of page 1- pg 3)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified Nguyen et al's method of printing a document with objects with Oliver et al's disclosure of positioning elements since it provides the benefit of giving the user any direct way to control the exact position of the images and text on their Web pages.

As per independent claim 5, Claim 5 recites similar limitations as in Claim 1 and is similarly rejected under rationale.

As per independent claim 18, Claim 18 recites similar limitations as in Claim 1 and is similarly rejected under rationale.

13. Claims 14-17 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al (US Patent 6,377,354, filed 9/21/1998, and further in view of W3School ("HTML Tutorial: Welcome to HTML School", published as of 1/23/2002).

As per independent claim 14, Nguyen et discloses of analyzing a "suggested" location of the text and graphics elements to be printed by determining if there is a conflict of overlapping between text and graphics elements, as known as the Z-order problem. If there is a overlapping conflict of the elements are "the suggested" location, Nguyen merges the two objects together (i.e. retrieve the other object's position and merge the two as one wherein the combined element overall position is determined too) then sent to output buffer to be formed (i.e. drawn). If there is no overlap, then the elements are automatically formed by sending it to the printer to be formed (i.e. drawn on the bitmap buffer) by the printer wherein the bitmap location information is marked after being drawn and then stored for printing. In addition, none of these locations are preset since they are considered as "suggested" and not set under after checking if any of the elements overlapped. Nguyen et al discloses that a document requires many print calls be processed hence the method is repeated every time for each object presented in the document. (Abstract; Column 6, lines 35-49, 59-62; Column 7, 4-8, 16-61) Therefore, Nguyen discloses the limitation of if the order of operation if the positions of the elements are determined first or the drawing of the elements occurs first.

However, Nguyen et al fails to disclose that the document is written in a structured tag language comprising tags. However, W3Schools discloses the language HTML wherein a HTML document contains markup tags that discloses how the document will appear when displayed (Pg 1, "HTML Introduction"; Pg 5).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified Nguyen et al's method of printing a document

with objects with W3School's disclosure of HTML documents since it would have provided HTML provides essential features of hypertext, that allows documents (web page) to link to over documents, and universally, that's allows any computer to read a HTML document since the documents are text files.

As per independent claim 15, Claim 15 recites similar limitations as in Claim 14 and is similarly rejected under rationale.

As per dependent claim 16 and 17, Nguyen et al fails to specifically disclose wherein images are formed in an order in a downward direction. It was well-known to one of ordinary skill in the art of a established standard that when images of a document are printed or formed by the printer, a printer has the ability to print images (or graphics, objects and/or elements) positioned at the top of the document are printed first, then the rest below are printed in a downward order to the bottom of the hard copy, hence a downward direction. In other words, an image that is positioned closest to the top would be formed/printed first, while next image positioned under the previous image would be printed/formed next, and so on until the last image positioned furthest/closest to the bottom of the document would be formed/printed last. Thus, images are formed in order of placement in a downward direction.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified Nguyen et al's method with the ability to print images in a top-to-bottom method since it was an established standard that provided the benefit of compatibility with all printers and devices to print in a top-to-bottom fashion.

Response to Arguments

14. Applicant's arguments filed 31 January 2008 have been fully considered but they are not persuasive.

15. On page 2, in regards to Claims 14-15, Applicant argues that Nguyen et al and W3Schools, do not teach or suggest all of the features and limitations of the claims. However, the Examiner disagrees.

Nguyen et discloses of analyzing a "suggested" location of the text and graphics elements to be printed by determining if there is a conflict of overlapping between text and graphics elements, as known as the Z-order problem. If there is a overlapping conflict of the elements are "the suggested" location, Nguyen merges the two objects together (i.e. retrieve the other object's position and merge the two as one wherein the combined element overall position is determined too) then sent to output buffer to be formed (i.e. drawn). If there is no overlap, then the elements are automatically formed by sending it to the printer to be formed (i.e. drawn on the bitmap buffer) by the printer wherein the bitmap location information is marked after being drawn and then stored for printing. In addition, none of these locations are preset since they are considered as "suggested" and not set under after checking if any of the elements overlapped. Nguyen et al discloses that a document requires many print calls be processed hence the method is repeated every time for each object presented in the document. (Abstract; Column 6, lines 35-49, 59-62; Column 7, 4-8, 16-61) Therefore, Nguyen discloses the

limitation of if the order of operation if the positions of the elements are determined first or the drawing of the elements occurs first.

However, Nguyen et al fails to disclose that the document is written in a structured tag language comprising tags. However, W3Schools discloses the language HTML wherein a HTML document contains markup tags that discloses how the document will appear when displayed (Pg 1, “HTML Introduction”; Pg 5).

It would have been obvious to one of ordinary skill in the art at the time of Applicant’s invention to have modified Nguyen et al’s method of printing a document with objects with W3School’s disclosure of HTML documents since it would have provided HTML provides essential features of hypertext, that allows documents (web page) to link to over documents, and universally, that’s allows any computer to read a HTML document since the documents are text files.

16. Applicant's arguments with respect to claims 1 and 5 have been considered but are moot in view of the new ground(s) of rejection.

Arguments address regarding of the new limitations of Claims 1 and 5 brought forth in the amendment of the document is written in a structured tag language comprising any "position"-type tags, "margin"-type tags and "line height"-type tags has been viewed the new ground of rejection of 35 USC 103(a) under new references using Oliver et al.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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/David Faber/
Examiner, Art Unit 2178

/CESAR B PAULA/

Primary Examiner, Art Unit 2178